Environmental Services CNG update:

The Environmental Services (ES) collections has started the transition to an alternative fuel Compressed Natural Gas (CNG) for the collection fleet. As of June 30, 2013, ES has received 12 of the 14 ordered trucks for CNG. ES plans to replace 14 diesel fueled trucks with CNG trucks per year. At that rate, in 5-6 years, 90% of the ES collection fleet will be converted to CNG.

The 14 trucks ordered consisted of the following:

Residential Collections:

The 11 side load trucks were ordered and delivered as of June 30, 2013. ES received two trucks in mid-May and these have been in operation for about 3 weeks. The remaining 9 still need AC units installed and for fleet services to prepare for operation. The two units in use have been working well operationally. The height of units only went up about 2 inches from the previous units used. ES is currently testing the units on different routes to determine the average fuel consumption per mile. As these are new units, ES is gradually working out any issues on a daily basis.

Brush and Bulky:

One rear load truck was ordered and that unit was received in mid-May. This unit has been in operation over the last three weeks. The rear load trucks are produced by a different manufacturer then the side loaders and front loaders. The truck runs well, but is taller than expected. The height of the unit is just at the legal height of 13 feet 6 inches. This has created a problem as we have been unable to use the unit in alleys. With all the low telephone and television cables, ES would be ripping too many wires down. ES is currently researching other options for CNG tank placement on this and future rear load units.

Commercial Front Load:

ES originally planned to receive two front load trucks prior to June 30, 2013, but in discussions between the truck manufacturer and ES, it was determined that having the CNG fuel tanks mounted below the body instead of the top was much more suitable for our operation. This changed the build specification and extended the completion of the trucks by another two months. Once these units are in operation ES will be able to supply an update.

Fueling Station Upgrade:

As ES is in the process of having a slow fill station built, ES has been using private fuel company suppliers like Clean Energy (which have two locations in Tucson) and Trillium (one location in Tucson but very convenient for ES as it is directly across the street from our office on Park and Ajo). Sun Tran currently operates a slow fill system which ES tested with the new units and it was unsuccessful as the system was built 17 years ago and requires upgrades to fill the units to full capacity. ES is working with a private contractor, WSM Architects, to prepare the Design Development for the upgrade of the CNG plant at Thomas Price Service Center.

From "Your Water Connection"
Tucson Water Bill Insert, May 2013

Environmental Services Converting to Compressed Natural Gas

Over the next several months, you may notice a change when the trash and recycling trucks come into your neighborhood. Then again, you may not, because you might not hear them coming. Beginning this month, Environmental Services (ES) is adding 14 new collection vehicles to its fleet that run on Compressed Natural Gas (CNG). These 14 new CNG powered trucks represent the start of ES' conversion to alternative fuel usage with plans to convert the entire fleet over the next five years.

There are economic as well as environmental benefits for making the switch to CNG:

- CNG is in abundant supply
- CNG is cheaper than diesel fuel
- CNG reduces vehicle emissions and is a more environmentally clean alternative gasoline and diesel
- Natural gas is much safer than other fuels in the event of a spill
- CNG-powered engines run quieter (ES customers shouldn't rely on collection truck noise as a last-minute reminder to put out containers!)

While the initial costs for a CNG collection truck are higher, these vehicles are less costly in the long run due to the lower fuel costs (with constant stopping and starting and heavy loads, garbage trucks burn a lot of fuel!). According to the Natural Gas Vehicles of America, trash haulers will recoup the higher initial costs of a natural gas truck within two years through fuel savings. Additionally, natural gas burns cleaner than conventional gasoline or diesel due to its lower carbon content. Every gallon of diesel fuel burned emits more than 22 pounds of CO2. ES expects that the carbon emissions on the CNG vehicles will be reduced by 20%.